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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,735	09/29/2003	Martin Miller	455610-2590.2	1934
20999	7590	07/17/2006	EXAMINER	
FROMMER LAWRENCE & HAUG			CHUNG, PHUNG M	
745 FIFTH AVENUE- 10TH FL.			ART UNIT	
NEW YORK, NY 10151			PAPER NUMBER	
			2138	

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/673,735	Applicant(s) MILLER ET AL.	
	Examiner Phung My Chung	Art Unit 2138	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 22-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10&12/04;2&8/06</u> . | 6) <input type="checkbox"/> Other: _____ |

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Detailed Action

1. Applicant's election without traverse of Group I, claims 1-21 on April 6, 2006 is acknowledged.
2. Claim 2 is objected to because of the following informalities: Line 5, a period - - - - should be inserted at the end of the claim. Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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4. Claims 1-4, 8-10 and 17-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4, and 10-13 of copending Application No. 10/673,712, and claims 1-4, 7 and 9 of copending Application No. 10/673,713. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitation of the rejected claims are claimed in at least one of the claims 1-4, and 10-13, and claims 1-4, 7 and 9 of application' copending applications, and there is no reason why the rejected claims could not have been presented in the copending applications 10/673,712 and 10/673,713.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims Comparison Table

	10/673,735	/	10/673,712	/	10/673,713
Claims:	1	/	1	/	1, 2, 3, 4, 7, 9
	2, 3, 4	/	2	/	
	8, 9	/	3	/	
	10	/	12	/	
	17	/	10	/	1, 2, 3, 4, 7, 9
	18, 19, 20	/	4, 13	/	
	21	/	11	/	

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verboom (US 2001/0021151 A1).

As per claims 17-20, Verboom discloses an apparatus for processing a data signal, comprising:

acquiring a data signal for a predetermined time (abstract and paragraph (0091));
storing the data signal in a memory (register) of the test instrument (paragraphs (0133 and 0084));
recovering a clock signal from the stored data signal (paragraph 0069); and

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slicing the stored data signal into a plurality of data segment of a predetermined length in accordance with the recovered clock signal (abstract and “sampling the read signal at channel bit locations to provide a plurality of samples”) and (paragraphs (0091-0094)). Verboom does not disclose displaying the plurality of data segments.... However, it would have been obvious to a person of ordinary skill in the art, at the time the invention, to display the data in order to allow a user to make adjustment.

As per claim 21, Verboom further discloses, wherein the clock recovery further comprises defining a threshold level relative to the stored data signal (paragraphs (0006-0013) and (0093));

comparing each portion of the stored data signal to the threshold level (paragraphs (0006) and (0093));

determining pairs of adjacent samples that straddle the threshold (paragraph (0105)); and estimates a time of crossing the threshold between the adjacent samples to obtain a series of observed times of threshold crossing (paragraph (0131)).

As per claim 1, this claim is rejected under similar rationale as set forth in claim 17.

As per claims 2-4, these claims are rejected under similar rationale as set forth in claim 21.

As per claims 5-9, Verboom further discloses:

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comparing the series of observed times of threshold crossing to an ideal perfectly periodic sequence of expected times of threshold crossing comprising the recovered virtual periodic clock (paragraphs (0006-0013));

determining an error between the observed times of threshold crossing and of the series of expected times of threshold crossing comprising the recovered virtual clock based upon the comparison (paragraphs (0006-0013)); and

adjusting the phase of the recovered virtual periodic clock in accordance with the determined error (paragraphs (0012-0090)).


As per claims 10-16, Verboom further disclose wherein the clock recovery unit compares each element of the series of observed times of threshold crossing to each elements of an ideal substantially periodic sequence of expected times of threshold crossing (paragraphs (0006-0013)), determines the error between each observed time and the corresponding expected time, and based upon each error and preceding errors (paragraphs (0006-0013)), adjusts the instantabeous phase of the substantially periodic sequence of times of threshold crossing according to mathematical algorithms thus obtaining a specified dynamic response for the recovered substantially periodic clock (paragraphs (0012-0090)).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung My Chung whose telephone number is 571-272-3818. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571- 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phung My Chung
Primary Patent Examiner